

REMARKS

Claims 1-29 remain in this application. Claims 1, 9, 19, and 24 have been amended. Applicant respectfully requests that the above-identified application be reconsidered in view of the following remarks.

The 35 U.S.C. § 102(e) Rejection

Claims 1-29 were rejected under 35 U.S.C. § 103(e) as being anticipated by U.S. Patent No. 6,275,907 to Baumgartner et al. (“Baumgartner”).

According to an embodiment of the present invention, before the coherence protocol results are determined or completed, a requesting node or a coherence agent on behalf of the requesting node may issue a speculative memory read request to a home node of the requested memory location. The home node having the requested location may be defined as the node whose main memory stores the data for memory location (address) to be read. The home node that receives the speculative read request may access a memory address space to retrieve data specified by the speculative read request. While the home node of the memory location processes the speculative read request, the coherence agent determines the results of a cache coherence protocol. Based on these results, the coherence agent may send a cancel or confirm command to the home node. The cancel command causes the home node to drop the retrieved data, while the confirm command causes the home node to return the accessed data to the requesting agent.

Claims 1 and 19, for example, have been amended and recite a receipt of a speculative read request and initiating a read to memory before results of a cache

coherence protocol are determined. Claims 9 and 24 have been similarly amended.

These features are neither shown or suggested by the Baumgartner reference.

Baumgartner concerns reservation management in a non-uniform memory access data processing system. As seen from Figure 3, a processor initiates execution of a load-reserve operation and it is determined if the processor is at the home node of the requested cache line, if it is, then in block 90, the line is obtained by the processor.

According to the Office Action at page 6 says that a speculative memory read requests is received at a home node before results of a cache coherence protocol (MESI) are determined. It is noted that the term “speculative” appears nowhere in the specification of Baumgartner. Looking at Col. 9, lines 13-47, it is clear that when a request for a cache line is made in a load-reserve operation, the cache coherency check is performed first before the cache line data is accessed. Though a read request may be made prior to the cache coherency check is determined, Baumgartner does not teach or suggest initiating the read to memory before the results of the cache coherency protocol are determined. Since this feature is found in each of the independent claims (and thus the dependent claims), reconsideration and withdrawal of the rejection of claims 1-29 under 35 U.S.C. § 102(e).

CONCLUSION

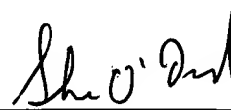
For all the above reasons, the Applicant respectfully submit that this application is now in condition for allowance. A Notice of Allowance is earnestly solicited.

The Examiner is invited to contact the undersigned at (202) 220-4255 to discuss any matter concerning this application. The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 11-0600.

Respectfully submitted,
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